

INDEX

	Page		Page
Abstinence syndrome.....	118, 122	Aminomorphides.....	21, 24
Acedicon. <i>See</i> dihydrocodeinone enol acetate.		Aminomorphine.....	21, 29, 30
Acetocodeine types.....	29	Aminophenanthrenes.....	51, 52, 54, 55
Acetylallopseudocodeine.....	10, 19, 28	Amyldihydromorphinone.....	32, 33
Acetylation—Morphine series.....	10, 19	Analgesia—Definition.....	6
Acetylation—Phenanthrene series. 49, 74, 79, 80, 81, 88			
Acetylcodeine.....	10, 19, 27	Basic derivatives—Morphine series.....	21, 23, 34
Acetylcodeine isomers. <i>See</i> under Isomers.		Benzofuro-[2, 3- <i>f</i>]-quinoline.....	101
Acetyldemethylodihydrothebaine (same as Acedicon).....	69	—, N-Methyl-1, 2, 3, 4-tetrahydro.....	101
Acetyldihydroallopseudocodeine.....	19, 28	—, 1, 2, 3, 4-Tetrahydro.....	101
Acetyldihydrocodeine.....	10, 19, 27, 28, 31	Benzofuro-[3, 2- <i>g</i>]-quinoline.....	101
Acetyldihydroisocodeine.....	19, 27, 31	—, N-Methyl-1, 2, 3, 4-tetrahydro.....	101
Acetyldihydromorphine. <i>See</i> Monoacetyldihydromorphine.		—, 1, 2, 3, 4-Tetrahydro.....	101
Acetyldihydropseudocodeine.....	19, 28	Benzofuroquinolines.....	101
Acetylhydroxycodeinone.....	31	Benzylidihydrodesoxymorphine-D.....	8, 12
Acetylisocodeine.....	10, 19, 27	Benzylidihydromorphine.....	8, 27
Acetyl- α -isomorphine. <i>See</i> Monoacetyl- α -isomorphine.		Benzyl ethers, phenolic.....	8
Acetyl- β -isomorphine. <i>See</i> Monoacetyl- β -isomorphine.		Benzylmorphine.....	4, 8, 27
Acetyl- γ -isomorphine. <i>See</i> Monoacetyl- γ -isomorphine.		Benzylmorphine methyl ether.....	8
Acetylmorphinol.....	48, 51	Blood pressure effects.....	8, 15
Acetylmorphine. <i>See</i> Monoacetylmorphine.		Bromocodeine.....	29, 30
Acetylmorphine isomers. <i>See</i> under Isomers.		14-Bromocodeinone.....	30, 31, 32
Acetylphenanthrenes.....	61, 62	Bromocodide.....	12, 13, 23, 24
Acetylpsedocodeine.....	10, 19, 28	Bromomorphide.....	4, 12, 13, 23, 24
Acetylthebaol.....	48, 50	Bromomorphine.....	29
Acynaphthalenes.....	64		
Addiction—Definition.....	115	Carbazole.....	41, 103, 104, 109
Addiction—Discussion.....	2, 122, 125, 126	—, 1-Amino.....	103, 104, 105
Adrenaline types—Phenanthrene series.....	73, 78	—, 3-Amino.....	103, 104, 105, 108
Alcoholic esters of morphine.....	10, 19	—, 6-Amino-1, 2, 3, 4-tetrahydro.....	106, 107, 108
Alcoholic ethers of morphine.....	9, 17	—, 1-Hydroxy-1, 2, 3, 4-tetrahydro.....	106, 107, 108
Alcoholic hydroxyl configuration.....	14, 15, 16, 26	—, 10-Hydroxy-1, 2, 3, 10-tetrahydro.....	106, 107, 108
Alcoholic hydroxyl substitutions.....	9, 13, 18, 19, 20, 22, 23, 24	—, 1-Keto-1, 2, 3, 4-tetrahydro.....	108
Aldehydes—Phenanthrene series.....	61	—, 3-Nitro.....	105
Alieyclic unsaturated linkages.....	26	—, 1-Nitro-3, 6-dibromo.....	105
Alkylation—Alcoholic hydroxyl.....	9, 17	—, 9-Nitroso-3-nitro.....	105
Alkylation—Phenanthrene series.....	47	—, 9-Acetyl:	
Alkylation—Phenolic hydroxyl.....	7, 8	—, —, 3-Amino.....	103, 104, 105
Allopseudocodeine.....	5, 7, 15, 19, 21, 22, 23, 28	—, 9-Ethyl:	
Amines, primary.....	55, 69, 74, 76, 78, 99	—, —, 3-Amino.....	103, 104, 105
Amines, secondary.....	55, 69, 76, 78, 86, 99	—, 9-Methyl:	
Amines, tertiary.....	55, 69, 74, 76, 78, 86, 99	—, —, 2-Acetyl.....	108
Amino alcohols—Carbazole series.....	106, 107, 108	—, —, 1-Amino.....	103, 104, 105
Amino alcohols—Dibenzofuran series.....	99	—, —, 3-Amino.....	103, 104, 105
Amino alcohols—Phenanthrene series.....	40, 73, 76, 79, 81, 85, 88, 92, 95	—, —, 2-[2-(Diethyl-amino)-1-hydroxy-n-propyl].....	107, 108
Aminocarbazoles.....	103, 109	—, —, 2 - [3 - (Dimethylamino) - 1 - hydroxy-n-propyl].....	106, 107, 108
Aminocodeine.....	29	—, —, 1-Nitro-3, 6-dibromo.....	105
Aminocodides.....	21, 24	Carbazole—Numbering system.....	103
Aminoketones—Dibenzofuran series.....	99	Carbazole—Schematic relations.....	109
Aminoketones—Phenanthrene series.....	72	Carbinols—Dibenzofuran series.....	97
		Carbinols—Phenanthrene series.....	61
		Cardiac effect.....	90
		Chemical structure and action—Conclusions.....	34, 69, 95, 102, 109, 110, 125

	Page		Page
Chemical structure and action—Discussion	2, 37, 114	Dihydrocodeine	7, 14, 18, 19, 20, 22, 23, 27, 31, 32
Chlorocodeine	20, 30	Dihydrocodeine isomers. <i>See</i> under Isomers.	
α -Chlorocodide	12, 13, 21, 23, 24, 27	Dihydrocodeine methyl ether (same as Tetrahydrothebaine)	18, 27, 121, 123, 125
β -Chlorocodide	12, 13, 23, 28	Dihydrocodeinone	16, 20, 24, 25, 31
Chlorodihydrocodide	5, 11, 13, 21, 23, 27, 28	Dihydrocodeinone enol acetate	28, 32, 69, 121, 125
β -Chlorodihydrocodide	13	Dihydrodesoxycodeine-D	11, 12, 21, 22, 28
δ -Chlorodihydrocodide	13	Dihydrodesoxymorphine-D	8, 11, 12, 21, 22, 24, 25, 28, 121, 122, 126
Chlorodihydromorphide	5, 11, 13, 23, 27, 28	Dihydroheterocodeine	9, 14, 18, 27, 121, 122, 124, 126
α -Chloromorphide	4, 12, 13, 21, 23, 24, 27	Dihydrohydroxycodeine-A	30, 31, 32
β -Chloromorphide	4, 12, 13, 21, 23, 28, 121, 122, 123, 126	Dihydrohydroxycodeine-B	30, 31, 32
Chloromorphine	29	Dihydrohydroxycodeine-C	30, 31, 32
Codeine	4, 7, 8, 14, 18, 19, 23, 27, 30, 34, 121, 123, 125	Dihydrohydroxycodeines	29, 30
Codeine isomers. <i>See</i> under Isomers.		Dihydrohydroxycodeinone	27, 29, 30, 69, 121, 122, 125
Codeine methobromide	33	Dihydroisocodeine	7, 14, 19, 20, 22, 23, 27, 31, 121, 125, 128
Codeine methochloride	34	Dihydro- α -isomorphine	7, 8, 14, 18, 20, 22, 23, 27, 121, 123
Codeine methomethyl sulfate	51	Dihydro- α -isomorphine alcoholic ethyl ether	14, 18, 27
Codeine methyl ether	9, 18, 27	Dihydro- α -isomorphine alcoholic methyl ether	14, 18, 27
Codeinone	16	Dihydro- β -isomorphine	7, 15, 20, 22, 28
Convulsant action—Definition	6	Dihydro- γ -isomorphine	7, 8, 15, 20, 22, 25, 28
Curare-like action	34	Dihydroisomorphinone	16, 20
Cyclic amino alcohols	88, 90, 92	Dihydromorphine	6, 8, 14, 18, 19, 20, 22, 23, 27, 32, 45
Cyclic ketones	92	Dihydromorphine alcoholic ethyl ether	14, 18, 27
Data, explanation of	6, 42, 116	Dihydromorphine isomers. <i>See</i> under Isomers.	
Dependence—Definition	115	Dihydromorphinone	16, 20, 24, 32, 121, 122, 126
Depression, general—Definition	6	Dihydrophenanthrene derivatives	40, 43, 54, 61, 70, 81, 95
Desocodeine. <i>See</i> Dihydrodesoxycodeine-D.		Dihydropseudocodeine	7, 15, 19, 20, 22, 25, 28
Desomorphine. <i>See</i> Dihydrodesoxymorphine-D.		Dihydropseudocodeinone	15, 16, 20
Desoxycodeine-C	5, 11, 12, 21, 22, 28	Dihydrothebaine	16, 28
Desoxycodeines	11	Dihydrothebainone	25, 27
Desoxymorphine-C	5, 11, 12, 21, 22, 28	Dilaudid. <i>See</i> Dihydromorphinone.	
Desoxymorphines	11	Dionin. <i>See</i> Ethylmorphine.	
Diacetyldihydrohydroxycodeine-B	31	Diphenylene oxide. <i>See</i> Dibenzofuran.	
Diacetyldihydrohydroxycodeine-C	31	Di-substitution phenanthrene derivatives	50, 64, 69
Diacetyldihydromorphine	27, 121, 125	Emetic action—Definition	6
Diacetylmorphine	27	Ephedrine types—Phenanthrene series	76, 79
Diastereomers. <i>See</i> also Isomers	4, 7, 14, 15	Esters (alcoholic) of morphine	10, 19
Dibenzofuran	41, 97, 98, 102	Ethanolamines	72, 81, 85
—, 2-Acetyl	97, 98	Ether oxygen bridge, opening of	25, 34
—, 3-Amino	97, 98	Ethers of morphine	7, 8, 9, 18
—, 2-(2-Amino-1-hydroxy-ethyl)	99, 100	Ethylation—Morphine series	8, 18
—, 2-[2-(Diethylamino)-1-hydroxy-ethyl]	99, 100	Ethylidihydro- α -isomorphine	8, 27
—, 2-[2-(Diethylamino)-1-oxo-ethyl]	99, 100	Ethylidihydro- γ -isomorphine	8, 28
—, 3-Dimethylamino	97, 98	Ethylidihydromorphinone	32
—, 2-[2-(Dimethylamino)-1-hydroxy-ethyl]	99, 100	Ethyl ethers, alcoholic	18
—, 2-[2-(Dimethylamino)-1-oxo-ethyl]	99, 100	Ethyl ethers, phenolic	8
—, 2-[2-(Ethylamino)-1-hydroxy-ethyl]	99, 100	Ethyl- α -isomorphine	8, 27
—, 2-Methyl carbinol	97, 98	Ethyl- γ -isomorphine	8, 28
—, 2-(2-Piperidino-1-hydroxy-ethyl)	99, 100	Ethylmorphine	4, 8
—, 2-Propionyl	97, 98	Eucodin. <i>See</i> Codeine methobromide.	
—, 1, 2, 3, 4-Tetrahydro	97, 98	Eukodal. <i>See</i> Dihydrohydroxycodeinone.	
—, —, —, 7-Acetyl	97, 98	Exciting effect—Definition	6
—, —, —, 7-[2-(Dimethylamino)-1-hydroxy-ethyl]	99, 100	Habituation—Definition	115
2-Dibenzofuran carboxylic acid	97, 98	Halogenocodides	5, 11, 12, 13, 21
—, Methyl ester	97, 98	Halogenomorphides	4, 11, 12, 13, 21
Dibenzofuran—Comparison with Phenanthrene	97, 100	Heart, effect on conduction in	90
Dibenzofuran—Numbering system	97	Heroin. <i>See</i> Diacetylmorphine.	
Dibenzofuran—Schematic relations	102	Heterocodeine	8, 9, 14, 18, 27
Dibenzofuran system in morphine	25, 41		
Dicodid. <i>See</i> dihydrocodeinone.			
8-Diethylaminocodide	23, 24		
8-Diethylaminomorphide	23, 24		
Dihydroallopseudocodeine	7, 15, 19, 20, 22, 25, 28		

Page	Page
Homologous derivatives — Phenanthrene series.....	61, 66, 92
Hydrogenation—Carbazole series.....	106, 107, 108
Hydrogenation—Dibenzofuran series.....	97, 98, 101
Hydrogenation—Morphine series.....	5, 11, 21, 26, 28, 29, 34
Hydrogenation—Phenanthrene series.....	40, 43, 54, 61, 81, 85, 88, 92
Hydroxyacetylphenanthrenes.....	63
Hydroxyaminophenanthrenes.....	58
14-Hydroxycodine.....	30
Hydroxycodine.....	27, 29, 30
Hydroxyl, alcoholic. <i>See</i> Alcoholic hydroxyl.	
Hydroxyl, phenolic. <i>See</i> Phenolic hydroxyl.	
Hydroxyphenanthrenes.....	47, 48
Hydroxyphenanthrylene oxides.....	48
Intestinal effect.....	7, 15
Isocodeine.....	5, 7, 14, 19, 23, 27, 121, 123, 125
Isomerism, spatial.....	4, 15, 17, 34
Isomerism, structural.....	4, 15, 17, 34
Isomers of acetylcodeine.....	19
Isomers of dihydromorphine.....	10, 19
Isomers of chlorocodide.....	12, 19
Isomers of chlorodihydrocodide.....	13
Isomers of chloromorphide.....	12, 19
Isomers of codeine.....	4, 7, 14, 15
Isomers of dihydrocodeine.....	5, 7, 14
Isomers of dihydrocodeinone.....	16
Isomers of dihydrohydroxycodine.....	30, 31, 32
Isomers of dihydromorphine.....	4, 5, 7, 14, 27, 28
Isomers of dihydromorphinone.....	16
Isomers of ethylmorphine.....	8, 17
Isomers of morphine.....	4, 5, 7, 14, 15, 27, 28
Isomers—Phenanthrene series.....	47, 48, 52, 55, 58, 61, 63, 66, 69, 73, 76, 88, 90
Isomethylidihydrocodeinone.....	30
α -Isomorphine.....	4, 5, 7, 8, 14, 18, 19, 23, 27, 121, 123, 125
α -isomorphine alcoholic ethyl ether.....	14, 18, 27
α -isomorphine alcoholic methyl ether.....	14, 18, 27
β -Isomorphine.....	4, 5, 7, 15, 19, 21, 22, 23, 28
γ -Isomorphine.....	4, 5, 7, 8, 15, 18, 19, 21, 22, 23, 28
γ -Isomorphine alcoholic ethyl ether.....	6, 18
γ -Isomorphine alcoholic methyl ether.....	5, 9, 18
Isonitrosoacetylphenanthrenes.....	75
Isopropylidihydromorphinone.....	32
Isoquinoline, 6,7-Diethoxy-1-(3', 4'-diethoxy-benzyl).....	125, 127
Isoquinoline system in morphine.....	39
Ketones—Dibenzofuran series.....	99
Ketones—Morphine series.....	16, 20, 32
Ketones—Phenanthrene series.....	61, 63, 64, 72
Methods of study.....	iii, 1, 39, 40, 42, 104, 114, 116
Methoxymethylidihydromorphine.....	8
Methylation—Morphine series.....	7, 18
Methylidihydrocodeine.....	20, 30, 32
Methylidihydrocodeinone.....	20, 30, 32
Methylidihydrocodeinone enol acetate.....	32
Methylidihydromorphine.....	20, 30, 32
Methylidihydromorphinone.....	20, 30, 32, 33, 121, 122, 123, 126, 127
Methyl ethers, alcoholic.....	9, 18
Methyl ethers, phenolic.....	8
Methylmorphenol.....	48, 51
α -Methylmorphimethine.....	51
β -Methylmorphimethine.....	51
β -Methylmorphimethine methomethylsulfate.....	51
ϵ -Methylmorphimethine.....	6
Methylmorphine. <i>See</i> Codeine.	
Monoacetyl dihydromorphine.....	10, 19, 27
Monoacetyl- α -isomorphine.....	10, 19
Monoacetyl- β -isomorphine.....	10, 19
Monoacetyl- γ -isomorphine.....	10, 19
Monoacetylmorphines.....	10, 19, 27
Monohydroxyphenanthrenes.....	47
Morphenol.....	41, 48, 49, 51
Morphigenine (Vahlen's).....	58, 60, 61
Morphine.....	2, 4, 7, 8, 14, 18, 19, 23, 27, 30, 34, 39, 45, 51, 59, 60, 114, 118, 121, 122, 123, 124
Morphine alcoholic ethyl ether.....	14, 18, 27
Morphine alcoholic methyl ether. <i>See</i> Herocodine.	
Morphine esters.....	4, 10, 19
Morphine ethers.....	4, 7, 8, 9, 18
Morphine isomers. <i>See</i> under Isomers.	
Morphine-like effect—Carbazole series.....	104
Morphine-like effect—Phenanthrene series.....	74, 94
Morphine methochloride.....	34
Morphine—Numbering system.....	4
Morphine sulfonic acids.....	29
Morphol.....	48, 49
Muzzling, alcoholic hydroxyl.....	17, 34
Muzzling, phenolic hydroxyl.....	7, 8, 34
Muzzling hydroxyl—Phenanthrene series.....	48, 49, 69, 74, 79, 88
Naphthalene.....	46, 65, 70
β -(1-Naphthoyl)-propionic acid.....	46
β -(2-Naphthoyl)-propionic acid.....	46
γ -(1-Naphthyl)-n-butyric acid.....	46
γ -(2-Naphthyl)-n-butyric acid.....	46
Nitrocodeine.....	29
Nitrogen, modification of.....	33, 34
Nitrosomorphine.....	29
Novocaine types.....	67
Nuclear substitutions—Morphine series.....	20, 30, 31, 32, 34
Numbering systems.....	4, 40, 97, 103
Octahydrophenanthrene derivatives.....	40, 43, 61, 63, 70, 85, 95
Oestrogenic activity.....	65
Peronin. <i>See</i> Benzylmorphine.	
Perparin.....	125, 127
Phenanthrene.....	40, 43, 45, 53, 70, 96
—, 2-Acetoxy.....	47
—, 3-Acetoxy.....	47
—, 2-Acetyl.....	61, 62
—, 3-Acetyl.....	61, 62, 64
—, 9-Acetyl.....	61, 62, 64
—, 3-(Acetylamino).....	52
—, 3-Aldehyde.....	61, 62
—, 9-Aldehyde.....	61, 62
—, 2-Amino.....	52, 56
—, 3-Amino.....	52, 56, 60
—, 9-Amino.....	52, 60
—, 3-(2-Amino-1-hydroxy-ethyl).....	73, 74, 75, 100
—, 3-(2-Amino-1-hydroxy-n-propyl).....	76, 78, 79
—, 9-(Aminomethyl).....	52, 53
—, 9-Bromo.....	53, 68
—, 3-Carbinol.....	61, 62
—, 9-Carbinol.....	61, 62

	Page		Page
Phenanthrene, 9-Cyano.....	53, 62, 68	Phenanthrene, 9, 10-Dihydro, 2-[2-(Diethyl-	
—, 3, 4-Diacetoxy.....	48	amino)-1-acetoxyethyl].....	81, 83
—, 3, 6-Diacetoxy.....	48, 50	—, —, 2-[2-(Diethylamino)-1-hydroxy-	
—, 3-[2-(Diethylamino)-1-hydroxy-ethyl].....	73,	ethyl].....	81, 83
74, 75, 100		—, —, 2-[2-(Diethylamino)-1-hydroxy-	
—, 3-[2-(Diethylamino)-1-hydroxy-n-pro-		n-propyl].....	82, 83
pyl].....	76, 78, 79	—, —, 2-[2-(Diethylamino)-1-oxo-	
—, 3-[3-(Diethylamino)-1-hydroxy-n-pro-		ethyl].....	81, 83
pyl].....	77, 78, 79	—, —, 2-Dimethylamino.....	54, 56, 57
—, 3-[2-(Diethylamino)-1-oxo-ethyl].....	72, 74, 75	—, —, 2-[2-(Dimethylamino)-1-acetoxy-	
—, 3, 4-Dihydroxy.....	48, 49	ethyl].....	81, 83
—, 3, 6-Dimethoxy-4-acetoxy.....	48, 50	—, —, 2-[2-(Dimethylamino)-1-hydroxy-	
—, 3-Dimethylamino.....	52, 53	ethyl].....	81, 83
—, 3-[2-(Dimethylamino)-1-hydroxy-		—, —, 2-(2-Piperidino-1-acetoxy-ethyl).81, 83	
ethyl].....	73, 74, 75, 100	—, —, 2-(2-Piperidino-1-hydroxy-	
—, 9-[2-(Dimethylamino)-1-hydroxy-		ethyl].....	81, 83
ethyl].....	73, 74, 75	—, —, 2-(2-Piperidino-1-hydroxy-n-	
—, 3-[2-(Dimethylamino)-1-hydroxy-n-		propyl].....	82, 83
propyl].....	76, 78, 79	—, —, 2-[2-(1, 2, 3, 4-Tetrahydroisoquin-	
—, 3-[2-(Dimethylamino)-1-oxo-ethyl].....	72,	olino)-1-acetoxy-ethyl].....	81, 83
74, 75, 100		—, —, 2-[2-(1, 2, 3, 4-Tetrahydroisoquin-	
—, 2-Ethoxy.....	47	olino)-1-hydroxy-ethyl].....	81, 83
—, 3-Ethoxy.....	47	—, —, 2-[2-(1, 2, 3, 4-Tetrahydroisoquin-	
—, 9-Ethoxy-10-acetyl-amino.....	58, 60	olino)-1-hydroxy-n-propyl].....	82, 83
—, 3-[2-(Diethylamino)-1-acetoxy-ethyl].....	73,	—, (Cis, trans) 1, 2, 3, 4, 9, 10, 11, 12-Octa-	
74, 75		hydro.....	45
—, 3-[2-(Ethylamino)-1-hydroxy-n-propyl]	76,	—, (Sym.) 1, 2, 3, 4, 5, 6, 7, 8-Octa-hydro..	40,
78, 79		43, 44	
—, 1-Hydroxy.....	47	—, —, 9-Acetyl.....	61, 62, 87
—, 2-Hydroxy.....	47	—, —, 9-[2-(Diethylamino)-1-hydroxy-	
—, 3-Hydroxy.....	47, 49, 60, 64	ethyl].....	85, 87
—, 4-Hydroxy.....	47	—, —, 9-[2-(Dimethylamino)-1-hy-	
—, 9-Hydroxy.....	47, 48, 60, 64	droxy-ethyl].....	85, 87
—, 3-Hydroxy-6-acetyl.....	63, 64, 65	—, —, 9-[2-(Dimethylamino)-1-hy-	
—, 9-Hydroxy-10-acetyl.....	63, 64, 65	droxy-n-propyl].....	86, 87
—, 9-Hydroxy-10-Acetyl-amino.....	58, 60	—, —, 9-[2-(Ethylamino)-1-hydroxy-n-	
—, 3-Hydroxy-4-amino.....	58, 60	propyl].....	86, 87
—, 3-Hydroxy-9-amino.....	58, 60	—, —, 1-Keto.....	63, 64, 65
—, 9-Hydroxy-10-amino.....	58, 60, 61	—, —, 1-Oxo.....	63, 64, 65
—, 3-Hydroxy-6-[2-(diethylamino)-1-		—, —, 9-(2-Piperidino-1-hydroxy-	
acetoxy-ethyl].....	79, 80	ethyl].....	85, 87
—, 3-Hydroxy-6-[2-(diethylamino)-1-		—, —, 9-(2-Piperidino-1-hydroxy-n-	
hydroxy-ethyl].....	79, 80	propyl].....	86, 87
—, 2-Methoxy.....	47	—, —, 9-Propionyl.....	61, 62
—, 3-Methoxy.....	47, 64, 68	—, 1, 2, 3, 4-Tetrahydro.....	43, 44, 46
—, 3-Methoxy-6-acetyl.....	63, 64, 65	—, —, 1-Amino.....	55, 56, 57
—, 3-Methoxy-9-acetyl.....	63, 64, 65	—, —, 4-Amino.....	55, 56, 57
—, 9-Methoxy-10-acetyl-amino.....	58, 60	—, —, 3-Diethylamino-4-hydroxy.....	88, 90
—, 3-Methoxy-9-amino.....	58, 60	—, —, 3-[(Diethylamino)-methyl]-4-	
—, 9-Methoxy-10-amino.....	58, 60	hydroxy.....	92, 93, 94
—, 3-Methoxy-9-diacetyl-amino.....	58, 60	—, —, 4-[(Diethylamino)-methyl]-4-	
—, 3-Methoxy-9-[2-(dimethylamino)-1-		oxo.....	92, 93, 94
hydroxy-ethyl].....	79, 80	—, —, 1-Dimethylamino.....	55, 56
—, 2-Methyl carbinol.....	61, 62, 63	—, —, 4-Dimethylamino.....	55, 56
—, 3-Methyl carbinol.....	61, 62, 63	—, —, 2-(Dimethylamino)-1-hydroxy.....	88, 90
—, 9-Methyl carbinol.....	61, 62, 63	—, —, 3-(Dimethylamino)-4-hydroxy.....	88, 90
—, 3-(2-Piperidino-1-hydroxy-ethyl).....	24,	—, —, 9-[2-(Dimethylamino)-1-hy-	
73, 74, 75, 100		droxy-n-propyl].....	86, 87
—, 3-(3-Piperidino-1-hydroxy-n-propyl).....	77,	—, —, 1-Keto.....	46, 57, 63, 64, 65, 93, 94
78, 79		—, —, 4-Keto.....	46, 57, 63, 64, 65, 93, 94
—, 3-(2-Piperidino-1-oxo-ethyl).....	72, 74, 75	—, —, 1-Methylamino.....	55, 56
—, 3-Propionyl.....	61, 62	—, —, 1-Oxo (Oxime).....	57, 63, 64, 65
—, 3-[3-(1, 2, 3, 4-Tetrahydroisoquinolino)-		—, —, 4-Oxo (Oxime).....	57, 63, 64, 65
1-hydroxy-n-propyl].....	77, 78, 79	—, —, 2-Piperidino-1-hydroxy.....	88, 90
—, 9, 10-Dihydro.....	40, 43, 44	—, —, 3-Piperidino-4-hydroxy.....	88, 90
—, —, 2-Acetyl.....	56, 61, 62	—, —, 2-(Piperidino-methyl)-1-hy-	
—, —, 2-Amino.....	54, 56	droxy.....	93, 94

	Page		Page
Phenanthrene, 1, 2, 3, 4-Tetrahydro, 2-(Piperidino-methyl)-1-oxo.....	93, 94	4, 5-Phenanthylene oxide, 3-Hydroxy....	41, 48, 49, 51
—, —, —, 3-(1, 2, 3, 4-Tetrahydroisoquinolino)-4-acetoxy.....	88, 90	—, 3-Methoxy.....	48, 51
—, —, —, 2-(1, 2, 3, 4-Tetrahydroisoquinolino)-1-hydroxy.....	88, 90	Phenanthrylene oxide system in morphine....	25
—, —, —, 3-(1, 2, 3, 4-Tetrahydroisoquinolino)-4-hydroxy.....	88, 90, 125, 127	Phenolic ethers of morphine.....	7, 8
—, —, —, 3-[(1, 2, 3, 4-Tetrahydroisoquinolino)-methyl]-4-hydroxy.....	93, 94	Phenolic hydroxyl substitutions....	4, 7, 8, 9, 10, 12, 13
Phenanthrene-2-carboxylic acid.....	66, 67, 68	Physical properties and action.....	37
—, Amide.....	66, 68	Piperidino-ethanol.....	24
—, Methyl ester.....	66, 68	8-Piperidocodide.....	6, 23
Phenanthrene-3-carboxylic acid.....	66, 67, 68	6-Piperidodihydromorphide.....	23, 24, 27
—, Amide.....	66, 68	6-Piperidomorphide.....	23, 24, 27
—, <i>N</i> -(Diethylamino)-ethyl ester.....	66, 67, 68	8-Piperidomorphide.....	23, 24
—, Dimethyl amide.....	66, 68	Polyhydroxyphenanthrenes.....	48
—, Methyl ester.....	66, 68	Propanolamines.....	76, 82, 86
Phenanthrene-9-carboxylic acid.....	66, 67, 68	Pseudocodeine....	5, 7, 18, 19, 21, 22, 23, 28, 121, 123, 125
—, Amide.....	66, 68	Pseudocodeine methyl ether.....	6, 9, 18
—, <i>N</i> -(Diethylamino)-ethyl ester.....	66, 67, 68	Pseudocodeine phenyl ether.....	18
—, 3-Methoxy.....	66, 68	Pseudocodeinone.....	6, 15, 16
—, Methyl ester.....	66, 68	Pseudomorphine.....	27
Phenanthrene-3-propionic acid.....	66, 68, 69	Pyridino-dibenzofurans. See Benzofuroquinolines.	
—, Amide.....	66, 68, 69	Quarternary alkylates.....	33, 34
—, Methyl ester.....	66, 68, 69	Respiratory effect—Definition.....	6
Phenanthrene—Absorption of.....	44	Schematic relations—Carbazole series.....	109
Phenanthrene—Comparison with carbazole.....	97	Schematic relations—Dibenzofuran series.....	102
Phenanthrene—Comparison with dibenzofuran.....	97, 100	Schematic relations—Phenanthrene series.....	70, 95
9-Phenanthrene, 10, 10-Dichloro.....	48	Tetrahydroallopseudocodeine.....	22, 25
Phenanthrenedisulfonate.....	50	Tetrahydrocarbazole derivatives.....	106, 107, 108
Phenanthrene methyl alcohols. See Phenanthrene carbinols.		Tetrahydrodesoxycodine.....	11, 12, 21, 22, 25
Phenanthrene—Numbering system.....	40	Tetrahydrodesoxymorphine.....	6, 11, 12, 21, 22, 25
3, 4-Phenanthrene quinone.....	49	Tetrahydrodibenzofuran derivatives.....	97, 98, 101
9, 10-Phenanthrene quinone.....	48	Tetrahydro- γ -isomorphine.....	21, 22, 25
9, 10-Phenanthrene quinone monoxime.....	61	Tetrahydroisoquinoline derivatives.....	77, 81, 88, 93
Phenanthrene—Schematic relations.....	70, 95	Tetrahydromorphine derivatives.....	5, 12, 22, 25
3-Phenanthrene sulfonic acid.....	50	Tetrahydrophenanthrene derivatives.....	43, 55, 63, 70, 86, 88, 92, 95
Phenanthrene system in morphine.....	2, 39, 45	Tetrahydropseudocodeine.....	21, 22, 25
Phenanthroic acids. See Phenanthrene carboxylic acids.		Tetrahydropseudomorphine.....	27
Phenanthrols. See Hydroxyphenanthrenes.		Tetrahydrothebaine (Same as Dihydrocodeine methyl ether).....	10, 18, 27, 28
β -(3-Phenanthryl)-acrylic acid.....	69	Thebaine.....	29, 30, 31, 50
δ -(3-Phenanthryl)-acrylic acid.....	69	Thebainone.....	27
4, 5-Phenanthrylene oxide.....	25, 41, 48	Tolerance—Definition.....	115
—, 3-Acetoxy.....	48, 51	Toxicity—Definition.....	6
		Veratrine-like effect.....	67